

## Claims:

1. An isolated polynucleotide comprising,  
a polynucleotide sequence which codes without interruption for an amino acid  
sequence set forth in SEQ ID NO 2, 12, 17, 26, 39, 44, 46, 48, 50, 52, or 59, or a complement  
5 thereto.
2. An isolated polynucleotide of claim 1, comprising a polynucleotide sequence set forth in  
SEQ ID NO 1, 11, 16, 25, 38, 43, 45, 47, 49, 51, or 58, or a complement thereto.
- 10 3. An isolated polynucleotide comprising,  
a polynucleotide sequence having 95% or more sequence identity along the entire  
length of the polynucleotide sequence set forth in SEQ ID NO 1, 11, 16, 25, 38, 43, 45, 47,  
49, 51, or 58 of claim 1, or a complement thereto.
- 15 4. An isolated polynucleotide comprising,  
a human polynucleotide sequence which hybridizes under high stringency conditions  
to a polynucleotide having a polynucleotide sequence set forth in SEQ ID NO 1, 11, 16, 25,  
38, 43, 45, 47, 49, 51, or 58 of claim 1, or a complement thereto.
- 20 5. An isolated polynucleotide of claim 4, wherein said high stringency conditions comprise  
hybridizing 42°C in 5X SSPE, 0.3% SDS, and 50% formamide, and washes at 65°C for 15  
minutes in 2X SSC, and 0.2% SDS.
6. An isolated polypeptide comprising,  
25 the amino acid sequence set forth in SEQ ID NOS 2, 12, 17, 26, 39, 44, 46, 48, 50,  
52, or 59.
7. An isolated polypeptide comprising,  
an amino acid sequence having 95% or more sequence identity along the entire length  
30 of the amino acid sequence of claim 6.

8. An isolated polypeptide which is coded for by a polynucleotide of claim 4.

9. A method of detecting a nucleic acid coding, comprising,

5       contacting a sample comprising nucleic acid with a polynucleotide probe specific for  
a human muscle selective polynucleotide of claim 1 under conditions effective for said probe  
to hybridize specifically with said polynucleotide, and  
detecting hybridization between said probe and said nucleic acid.

10. A method of claim 9, wherein said detecting is performed by:

10       Northern blot analysis, polymerase chain reaction (PCR), reverse transcriptase PCR,  
RACE PCR, or *in situ* hybridization.

11. A method of diagnosing a disease associated with abnormal expression of a gene in a  
subject, or determining a subject's susceptibility to such disease, comprising:

15       assessing the expression of said gene in said subject.

12. A method of claim 11, wherein assessing is:

measuring expression levels of said gene, determining the genomic structure of said  
gene, determining the mRNA structure of transcripts from said gene, or measuring the  
20       expression levels of polypeptide coded for by said gene, and

13. A method of claim 11, wherein said assessing is performed by:

Northern blot analysis, polymerase chain reaction (PCR), reverse transcriptase PCR,  
RACE PCR, or *in situ* hybridization, and  
25       using a polynucleotide probe having a polynucleotide sequence selected from SEQ ID  
NO 1, 11, 16, 25, 38, 43, 45, 47, 49, 51, or 58, or a complement thereto.

14. A method for identifying an agent that modulates the expression of a gene in a cell,  
comprising,

30       contacting a cell population with a test agent under conditions effective for said test  
agent to modulate the expression of a polynucleotide of claim 1 in said cells, and

determining whether said test agent modulates said polynucleotide.

15. A method for identifying an agent that modulates the expression of a polypeptide coded for a gene, comprising,

5           contacting a polypeptide coded for by a polynucleotide of claim 1, with a test agent under conditions effective for said test agent to modulate said polypeptide, and  
          determining whether said test agent modulates said polypeptide.

16. A method of claim 15, wherein said test agent is an antibody.

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17. A method of identifying a genetic basis for a disease or disease-susceptibility, comprising:

          determining the association of a disease or disease-susceptibility with a polynucleotide of claim 1.

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18. A method of claim 17, wherein determining is performed by producing a human-linkage map using said polynucleotide.

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19. A method of claim 17, wherein determining is performed by comparing the nucleotide sequences of said polynucleotide between normal subjects and subjects having a muscle disease.

20. A non-human, transgenic mammal, or a cell thereof, whose genome comprises a functional disruption of a homolog of a gene of claim 1.

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21. A method of advertising genes for sale, commercial use, or licensing, comprising,  
          displaying in a computer-readable medium a polynucleotide set forth in SEQ ID NO 1, 11, 16, 25, 38, 43, 45, 47, 49, 51, or 58 of claim 1, or complements thereto.

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22. A method of selecting a polynucleotide sequence coding for a polypeptide, or a polypeptide sequence thereof, from a database comprising polynucleotide sequences and/or

polypeptide sequences, comprising

displaying, in a computer-readable medium, a polynucleotide sequence of claim 1, or polypeptide encoded thereby, or complements to the polynucleotides sequence,

wherein said displayed sequences have been retrieved from said database upon  
5 selection by a user.

23. An antibody which is specific for a polypeptide of claim 6, 7, or 8.